

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method of recording marks representing data in an information layer of a record carrier by irradiating the information layer by means of a pulsed radiation beam, each mark being written by a sequence of pulses, the recorded marks being erasable by irradiating the information layer with an erase radiation beam,

wherein said erase radiation beam between two successive sequences of pulses for writing marks consists of three erase periods, and wherein said erase radiation beam has a first erase power level for a first erase period followed by a second erase power level higher than said first erase power level for a second erase period followed by a third erase power level lower than said

second erase power level for a third erase period.

2. (Previously Presented) A method of recording marks representing data in an information layer of a record carrier by irradiating the information layer by means of a pulsed radiation beam, each mark being written by a sequence of pulses, the recorded marks being erasable by irradiating the information layer with an erase radiation beam,

wherein said erase radiation beam between two successive sequences of pulses for writing marks consists of three erase periods, and wherein said erase radiation beam has a first erase power level for a first erase period followed by a second erase power level higher than said first erase power level for a second erase period followed by a third erase power level lower than said second erase power level for a third erase period,

wherein said third erase power level is lower than said first erase power level.

Claim 3 (Canceled)

4. (Original) The method as claimed in claim 1,  
wherein said second erase power level is lower than the write power level (w) of said pulses of said pulsed radiation beam for recording marks.

5. (Original) The method as claimed in claim 1,  
wherein said third erase power level is higher than the bias power level (b) between said pulses of said pulsed radiation beam for recording marks.

6. (Original) The method as claimed in claim 1,  
wherein said first erase period and said second erase period are shorter than said third erase period.

7. (Previously Presented) A method of recording marks representing data in an information layer of a record carrier by irradiating the information layer by means of a pulsed radiation beam, each mark being written by a sequence of pulses, the recorded

marks being erasable by irradiating the information layer with an erase radiation beam,

wherein said erase radiation beam between two successive sequences of pulses for writing marks consists of three erase periods, and wherein said erase radiation beam has a first erase power level for a first erase period followed by a second erase power level higher than said first erase power level for a second erase period followed by a third erase power level lower than said second erase power level for a third erase period,

wherein the sum of said first erase period and said second erase period is shorter than half the shortest mark being recorded.

8.(Original) The method as claimed in claim 1,

wherein said information layer has a phase which is reversibly changeable between a crystal phase and an amorphous phase.

9.(Original) The method as claimed in claim 1,

wherein said record carrier comprises at least two information layers.

10. (Original) The method as claimed in claim 9,  
wherein at least one of said at least two information layers  
is an at least partially transparent layer.

11. (Previously Presented) A recording device for recording  
marks representing data in an information layer of a record carrier  
by irradiating the information layer by means of a pulsed radiation  
beam, the device comprising a radiation source providing said  
radiation beam and a control unit for controlling the power of said  
radiation beam, such that each mark is written by a sequence of  
pulses and the recorded marks are erasable by irradiating the  
information layer with an erase radiation beam,

wherein a control unit is operative for controlling said  
radiation beam such that said erase radiation beam between two  
successive sequences of pulses for writing marks consists of three  
erase periods, and wherein said erase radiation beam has a first  
erase power level for a first erase period followed by a second  
erase power level higher than said first erase power level for a

second erase period followed by a third erase power level lower than said second erase power level for a third erase period.

12. (Previously Presented) A recording device for recording marks representing data in an information layer of a record carrier by irradiating the information layer by means of a pulsed radiation beam, the device comprising a radiation source providing said radiation beam and a control unit for controlling the power of said radiation beam, such that each mark is written by a sequence of pulses and the recorded marks are erasable by irradiating the information layer with an erase radiation beam,

wherein a control unit is operative for controlling said radiation beam such that said erase radiation beam between two successive sequences of pulses for writing marks consists of three erase periods, and wherein said erase radiation beam has a first erase power level for a first erase period followed by a second erase power level higher than said first erase power level for a second erase period followed by a third erase power level lower than said second erase power level for a third erase period,

wherein said control unit is operative for controlling said radiation beam such that the third erase power level is lower than the first erase power level.

Claim 13 (Canceled)

14. (Currently Amended) A method of recording marks on a record carrier, the method comprising the acts of:

irradiating the record carrier with a radiation beam, each mark being written by a sequence of pulses, and

erasing recorded marks by irradiating the record carrier with an erase radiation beam comprising three erase periods,

wherein said erase radiation beam has a first erase power level for a first erase period followed by a second erase power level higher than said first erase power level for a second erase period followed by a third erase power level lower than said first erase power level for a third erase period, wherein the marks represent data including a high period and a low period, and wherein a start of the erase radiation beam substantially coincides

with a beginning of the low period.

Claim 15 (Canceled)

16. (Previously Presented) A method of recording marks on a record carrier, the method comprising the acts of:

irradiating the record carrier with a radiation beam, each mark being written by a sequence of pulses, and

erasing recorded marks by irradiating the record carrier with an erase radiation beam comprising three erase periods,

wherein said erase radiation beam has a first erase power level for a first erase period followed by a second erase power level higher than said first erase power level for a second erase period followed by a third erase power level lower than said first erase power level for a third erase period, wherein the marks represent data including a high period and a low period, and wherein the three erase periods substantially fill the low period.

17. (Previously Presented) The method of claim 1, wherein the



data includes a high period and a low period, and wherein a start of the erase radiation beam substantially coincides with a beginning of the low period.

18. (Previously Presented) The method of claim 1, wherein the data includes a high period and a low period, and wherein the three erase periods substantially fill the low period.

19. (Currently Amended) A recording device comprising:  
means for irradiating a record carrier with a radiation beam to record a mark; and

means for erasing recorded marks by irradiating the record carrier with an erase radiation beam comprising three erase periods;

wherein the erase radiation beam includes a first erase power level for a first erase period followed by a second erase power level higher than the first erase power level for a second erase period, followed by a third erase power level lower than the first erase power level for a third erase period, wherein the recorded

marks represent data including a high period and a low period, and  
wherein a start of the erase radiation beam substantially coincides  
with a beginning of the low period.

Claim 20 (Canceled)

21. (Previously Presented) A recording device comprising:

means for irradiating a record carrier with a radiation beam  
to record a mark; and

means for erasing recorded marks by irradiating the record  
carrier with an erase radiation beam comprising three erase  
periods;

wherein the erase radiation beam includes a first erase power  
level for a first erase period followed by a second erase power  
level higher than the first erase power level for a second erase  
period, followed by a third erase power level lower than the first  
erase power level for a third erase period, wherein the recorded  
marks represent data include a high period and a low period, and  
wherein the erase radiation beam includes pulses that substantially

fill the low period.

22. (Currently Amended) A recording device comprising a controller configured to:

irradiate a record carrier with a radiation beam to record a mark; and

erase recorded marks by irradiating the record carrier with an erase radiation beam comprising three erase periods;

wherein the erase radiation beam includes a first erase power level for a first erase period followed by a second erase power level higher than the first erase power level for a second erase period, followed by a third erase power level lower than the first erase power level for a third erase period, wherein the recorded marks represent data including a high period and a low period, and wherein a start of the erase radiation beam substantially coincides with a beginning of the low period.

Claim 23 (Canceled)

24. (Previously Presented) A recording device comprising a controller configured to:

irradiate a record carrier with a radiation beam to record a mark; and

erase recorded marks by irradiating the record carrier with an erase radiation beam comprising three erase periods;

wherein the erase radiation beam includes a first erase power level for a first erase period followed by a second erase power level higher than the first erase power level for a second erase period, followed by a third erase power level lower than the first erase power level for a third erase period, wherein the recorded marks represent data include a high period and a low period, and wherein the erase radiation beam includes pulses that substantially fill the low period.

25. (Previously Presented) A method of recording marks on a record carrier, the method comprising the acts of:

irradiating the record carrier with a radiation beam, each mark being written by a sequence of pulses; and

erasing recorded marks by irradiating the record carrier with an erase radiation beam;

wherein the recorded marks represent data including a high period and a low period, and wherein a start of the erase radiation beam substantially coincides with a beginning of the low period, and

wherein the erase radiation beam has a first erase power level for a first erase period followed by a second erase power level higher than said first erase power level for a second erase period followed by a third erase power level lower than said first erase power level for a third erase period.

26. (Previously Presented) A method of recording marks on a record carrier, the method comprising the acts of:

irradiating the record carrier with a radiation beam, each mark being written by a sequence of pulses; and

erasing recorded marks by irradiating the record carrier with an erase radiation beam;

wherein the recorded marks represent data including a high

period and a low period, and wherein a start of the erase radiation beam substantially coincides with a beginning of the low period, and

wherein the erase radiation beam has a first erase power level for a first erase period followed by a second erase power level higher than said first erase power level for a second erase period followed by a third erase power level lower than said first erase power level for a third erase period, wherein the erase radiation beam includes pulses that substantially fill the low period.

27. (Previously Presented) A recording device comprising a controller configured to:

irradiate a record carrier with a radiation beam to record a mark; and

erase recorded marks by irradiating the record carrier with an erase radiation beam;

wherein the recorded marks represent data including a high period and a low period, and wherein a start of the erase radiation beam substantially coincides with a beginning of the low period,

and

wherein the erase radiation beam has a first erase power level for a first erase period followed by a second erase power level higher than said first erase power level for a second erase period followed by a third erase power level lower than said first erase power level for a third erase period.

28. (Previously Presented) A recording device comprising a controller configured to:

irradiate a record carrier with a radiation beam to record a mark; and

erase recorded marks by irradiating the record carrier with an erase radiation beam;

wherein the recorded marks represent data including a high period and a low period, and wherein a start of the erase radiation beam substantially coincides with a beginning of the low period, and

wherein the erase radiation beam has a first erase power level for a first erase period followed by a second erase power level

higher than said first erase power level for a second erase period followed by a third erase power level lower than said first erase power level for a third erase period, wherein the erase radiation beam includes pulses that substantially fill the low period.

29. (Previously Presented) A method of recording marks on a record carrier, the method comprising the acts of:

irradiating the record carrier with a radiation beam, each mark being written by a sequence of pulses; and

erasing recorded marks by irradiating the record carrier with an erase radiation beam;

wherein the recorded marks represent data including a high period and a low period, and wherein the erase radiation beam includes pulses that substantially fill the low period, wherein a second pulse of the pulses of the erase radiation beam has a higher level than a first pulse and a third pulse of the erase radiation beam, the first pulse and the third pulse of the erase radiation beam having different power levels.



30. (Previously Presented) The method of claim 29, wherein a start of the erase radiation beam substantially coincides with a beginning of the low period.

31. (Previously Presented) A recording device comprising a controller configured to:

irradiate a record carrier with a radiation beam to record a mark; and

erase recorded marks by irradiating the record carrier with an erase radiation beam;

wherein the recorded marks represent data including a high period and a low period, and wherein the erase radiation beam includes pulses that substantially fill the low period, wherein a second pulse of the pulses of the erase radiation beam has a higher level than a first pulse and a third pulse of the erase radiation beam, the first pulse and the third pulse of the erase radiation beam having different power levels.

32. (Previously Presented) The recording device of claim 31,

wherein a start of the erase radiation beam substantially coincides with a beginning of the low period.